

Rptg Cat	STAAR	STAAR Modified	Readiness Standards	Supporting Standards
1 Geometric Structure	10	8	<p>G.2.B make conjectures about angles, lines, polygons, circles, and three-dimensional figures and determine the validity of the conjectures, choosing from a variety of approaches such as coordinate, transformational, or axiomatic</p> <p>G.3.C use logical reasoning to prove statements are true and find counter examples to disprove statements that are false</p>	<p>G.1.B recognize the historical development of geometric systems and know mathematics is developed for a variety of purposes</p> <p>G.1.C compare and contrast the structures and implications of Euclidean and non-Euclidean geometries</p> <p>G.2.A use constructions to explore attributes of geometric figures and to make conjectures about geometric relationships</p> <p>G.3.A determine the validity of a conditional statement, its converse, inverse, and contrapositive</p> <p>G.3.B construct and justify statements about geometric figures and their properties</p> <p>G.3.D use inductive reasoning to formulate a conjecture</p> <p>G.3.E use deductive reasoning to prove a statement</p>
2 Geometric Patterns and Representations	8	6	<p>G.5.A use numeric and geometric patterns to develop algebraic expressions representing geometric properties</p> <p>G.5.D identify and apply patterns from right triangles to solve meaningful problems, including special right triangles (45-45-90 and 30-60-90) and triangles whose sides are Pythagorean triples</p>	<p>G.4.A select an appropriate representation (concrete, pictorial, graphical, verbal, or symbolic) in order to solve problems</p> <p>G.5.B use numeric and geometric patterns to make generalizations about geometric properties, including properties of polygons, ratios in similar figures and solids, and angle relationships in polygons and circles</p> <p>G.5.C use properties of transformations and their compositions to make connections between mathematics and the real world, such as tessellations</p>
3 Dimensionality and the Geometry of Location	10	8	<p>G.7.B use slopes and equations of lines to investigate geometric relationships, including parallel lines, perpendicular lines, and special segments of triangles and other polygons</p> <p>G.7.C derive and use formulas involving length, slope, and midpoint</p>	<p>G.6.A describe and draw the intersection of a given plane with various three-dimensional geometric figures</p> <p>G.6.B use nets to represent and construct three-dimensional geometric figures</p> <p>G.6.C use orthographic and isometric views of three-dimensional geometric figures to represent and construct three-dimensional geometric figures and solve problems</p> <p>G.7.A use one- and two-dimensional coordinate systems to represent points, lines, rays, line segments, and figures</p>
4 Congruence and the Geometry of Size	16	14	<p>G.8.A find areas of regular polygons, circles, and composite figures</p> <p>G.8.C derive, extend, and use the Pythagorean Theorem</p> <p>G.8.D find surface areas and volumes of prisms, pyramids, spheres, cones, cylinders, and composites of these figures in problem situations</p> <p>G.10.B justify and apply triangle congruence relationships</p>	<p>G.8.B find areas of sectors and arc lengths of circles using proportional reasoning</p> <p>G.8.E use area models to connect geometry to probability and statistics</p> <p>G.8.F use conversions between measurement systems to solve problems in real-world situations</p> <p>G.9.A formulate and test conjectures about the properties of parallel and perpendicular lines based on explorations and concrete models</p> <p>G.9.B formulate and test conjectures about the properties and attributes of polygons and their component parts based on explorations and concrete models</p> <p>G.9.C formulate and test conjectures about the properties and attributes of circles and the lines that intersect them based on explorations and concrete models</p> <p>G.9.D analyze the characteristics of polyhedra and other three-dimensional figures and their component parts based on explorations and concrete models</p> <p>G.10.A use congruence transformations to make conjectures and justify properties of geometric figures including figures represented on a coordinate plane</p>
5 Similarity and the Geometry of Shape	8	6	<p>G.11.C develop, apply, and justify triangle similarity relationships, such as right triangle ratios, trigonometric ratios, and Pythagorean triples using a variety of methods</p> <p>G.11.D describe the effect on perimeter, area, and volume when one or more dimensions of a figure are changed and apply this idea in solving problems</p>	<p>G.11.A use and extend similarity properties and transformations to explore and justify conjectures about geometric figures</p> <p>G.11.B use ratios to solve problems involving similar figures;</p>
STAAR	52 (5 Grid)		31-34 questions from Readiness Standards	18-21 questions from Supporting Standards
STAAR Modified		42 (1 Grid)	25-27 questions from Readiness Standards	15-17 questions from Supporting Standards